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NOTICE OF ALLOWANCE AND FEE(S) DUE

66547

7590

02/18/2010

THE FARRELL LAW FIRM, LLP 290 Broadhollow Road Suite 210E Melville, NY 11747 EXAMINER

ABRAHAM, ESAW T

ART UNIT PAPER NUMBER

2112

DATE MAILED: 02/18/2010

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/585.051	05/30/2007	Kun-Min Yeo	1403-15 PCT US	7981	

TITLE OF INVENTION: METHOD FOR CREATING FEEDBACK MESSAGE FOR ARQ IN MOBILE COMMUNICATION SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/18/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO:	RNEY DOCKET NO.	CONFIRMATION NO.
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THE FARRELL	LAW FIRM, LLP	ABRAHAM, ESAW T			
290 Broadhollow I	Road	ART UNIT	PAPER NUMBER		
Suite 210E Melville, NY 1174	7		2112 DATE MAILED: 02/18/2010		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 460 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 460 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/585,051	YEO ET AL.			
Notice of Allowability	Examiner	Art Unit			
	ESAW T. ABRAHAM	2112			
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commun IGHTS. This application is su and MPEP 1308.	this application. If not included nication will be mailed in due cour	se. THIS		
2. X The allowed claim(s) is/are 16, 19, 20, 23 and 25 (renumber	ered as 1-5 <u>)</u> .				
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	be been received. been received in Application	No	from the		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.				
INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Su Paper No./N 7. ☐ Examiner's A	ormal Patent Application mmary (PTO-413), fail Date mendment/Comment Statement of Reasons for Allowan	ce		

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Art Unit: 2112

DETAILED ACTION

Response to Amendment

- The reply filed February 02, 2010 has been received and entered.
- Claims 1-15, 17-18, 21-22, 24, and 26-32 have been canceled. Therefore, claims 16, 19, 20, 23 and 25 are pending in the application.
- Newly amended <u>Abstract</u> is accepted.
- Specification objections are withdrawn in view of applicant's amendments.
- The objection to the <u>drawings</u> is withdrawn in view of the submitted <u>replacement sheet</u>.
- The rejection of claims 13-25 <u>under 35 U.S.C. § 101</u> is withdrawn in view of applicant's amendments.
- The rejection of claims 13-25 <u>under 35 U.S.C. § 112</u>, second paragraph, is withdrawn in view of applicant's amendments.

Allowable Subject Matter

1. Claims **16**, **19**, **20**, **23** and **25** are allowed. The following is an Examiner's statement of reasons for allowance:

Independent **claim 16** of the present application teaches, for example, A method, performed in a wireless communication system., for sending a feedback message for an automatic repeat request, comprising recording an ACK type in a first field, wherein the ACK type indicates one of a selective ACK type, a cumulative ACK type, a cumulative-selective ACK type, and a cumulative-bulk ACK type; determining a last block sequence number of successive blocks that

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are successfully received by a first wireless communication device from a second wireless communication device, to record the determined last block sequence number in a second field; recording, in a third field, types of groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number if the ACK type is the cumulative-bulk ACK type; determining lengths of the groups to record the determined lengths of the groups in a fourth field if the ACK type is the cumulative-bulk ACK type; and sending, by the first wireless communication device, a feedback message including fields from the first field to the fourth field.

Particularly, the prior art of record taken singly or in combination fail to teach, anticipate, suggest, or render obvious the foregoing limitations "recording an ACK type in a first field, wherein the ACK type indicates one of a selective ACK type, a cumulative ACK type, a cumulative-selective ACK type, and a cumulative-bulk ACK type; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the determined last block sequence number in a second field; recording, in a third field, types of groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number if the ACK type is the cumulative-bulk ACK type; determining lengths of the groups to record the determined lengths of the groups in a fourth field if the ACK type is the cumulative-bulk ACK type; and sending, by the first wireless communication device, a feedback message including fields from the first field to the fourth field". Consequently, claim 16 is allowed over the prior arts.

Independent claim 19 of the present application teaches, for example, A method, performed in a -wireless communication system, for sending a feedback message for an automatic repeat request, comprising recording an ACK type in a first field, wherein the ACK type indicates one of a selective ACK type, a cumulative ACK type, a cumulative-selective ACK type, and a cumulative-bulk ACK type; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the determined last block sequence number in a second field; determining a number of ACK maps to record the determined number of the ACK maps in a third field; if the ACK type is the cumulative-bulk ACK type, recording, in a fourth field of each of the ACK maps, types of the groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number, wherein the types of the groups indicate type whether each of the groups is successfully received, and determining lengths of the groups for each of the ACK maps, to record the determined lengths of the groups in a fifth field of each of the ACK maps; and sending, by the first wireless communication device, a feedback message including fields from the first field to the fifth field.

Particularly, the prior art of record taken singly or in combination fail to teach, anticipate, suggest, or render obvious the foregoing limitations "recording an ACK type in a first field, wherein the ACK type indicates one of a selective ACK type, a cumulative ACK type, a cumulative-selective ACK type, and a cumulative-bulk ACK type; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the determined last block sequence number in a second field; determining a number of ACK maps to record the

determined number of the ACK maps in a third field; if the ACK type is the cumulative-bulk ACK type, recording, in a fourth field of each of the ACK maps, types of the groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number, wherein the types of the groups indicate type whether each of the groups is successfully received, and determining lengths of the groups for each of the ACK maps, to record the determined lengths of the groups in a fifth field of each of the ACK maps; and sending, by the first wireless communication device, a feedback message including fields from the first field to the fifth field". Consequently, claim 19 is allowed over the prior arts.

Independent claim 20 of the present application teaches, for example, A method performed in a wireless communication system, for sending a feedback message for an automatic repeat request, comprising recording an ACK type in a first field; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the determined last block sequence number in a second field; determining a number of groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number, to record the determined number of groups in a third field; recording types of the groups in a fourth field, wherein the types of the groups indicate whether each of the groups is successfully received; determining; lengths of the groups to record the determined lengths of the groups in a fifth field; and sending, by the first wireless communication device, a feedback message including fields from the first field to the fifth field.

Particularly, the prior art of record taken singly or in combination fail to teach, anticipate, suggest, or render obvious the foregoing limitations "recording an ACK type in a

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first field; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the determined last block sequence number in a second field; determining a number of groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number, to record the determined number of groups in a third field; recording types of the groups in a fourth field, wherein the types of the groups indicate whether each of the groups is successfully received; determining; lengths of the groups to record the determined lengths of the groups in a fifth field; and sending, by the first wireless communication device, a feedback message including fields from the first field to the fifth field". Consequently, claim 20 is allowed over the prior arts.

Independent **claim 25** of the present application teaches, for example, a method, performed in a wireless communication system, for sending a feedback message for an automatic repeat request, comprising: recording an ACK type in a first field, wherein the ACK type indicates one of a selective ACK type, a cumulative ACK type, a cumulative-selective ACK type, and a cumulative-bulk ACK type; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the last block sequence number in a second field; determining a number of ACK maps to record the determined number of the ACK maps in a third field; if the ACK type is the cumulative-bulk ACK type, determining a number of groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number, to record information on the determined number of groups for each of the ACK maps in a fourth field of each of the ACK maps, recording types of the groups for

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each of the ACK maps in a fifth field of each of the ACK maps, wherein the types of the groups indicates type whether each of the groups is successfully received, and determining lengths of the groups for each of the ACK maps, to record the determining lengths of the groups in a sixth field of each of the ACK maps; and sending, by the first wireless communication device, a feedback message including fields from the first field to the sixth field.

Particularly, the prior art of record taken singly or in combination fail to teach, anticipate, suggest, or render obvious the foregoing limitations "recording an ACK type in a first field, wherein the ACK type indicates one of a selective ACK type, a cumulative ACK type, a cumulative-selective ACK type, and a cumulative-bulk ACK type; determining a last block sequence number of successive blocks that are successfully received by a first wireless communication device from a second wireless communication device, to record the last block sequence number in a second field; determining a number of ACK maps to record the determined number of the ACK maps in a third field; if the ACK type is the cumulative-bulk ACK type, determining a number of groups of successive blocks that are successfully or unsuccessfully received after the last block sequence number, to record information on the determined number of groups for each of the ACK maps in a fourth field of each of the ACK maps, recording types of the groups for each of the ACK maps in a fifth field of each of the ACK maps, wherein the types of the groups indicates type whether each of the groups is successfully received, and determining lengths of the groups for each of the ACK maps, to record the determining lengths of the groups in a sixth field of each of the ACK maps; and sending, by the first wireless communication device, a feedback message including fields from the first field to the sixth field". Consequently, claim 23 is allowed over the prior arts.

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Dependent claim 23 depends from allowable independent claim 20 and inherently includes limitations therein and therefore is allowed as well.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Esaw T. Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8am-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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/Esaw T Abraham/ Primary Examiner, Art Unit 2112 02/12/10